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SENADOR VIRTUAL

16 YEARS OF CROWDLAW IN THE CHILEAN PARLIAMENT

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NOVEMBER 2019

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ACKNOWLEDGMENTS

This research was conducted thanks to a research agreement with the Chilean Senate, as part of the "CrowdLaw: Citizen Engagement Technologies in the Legislative Process" joint project between the School of Law, the School of Communications and Journalism and the School of Government of Universidad Adolfo Ibañez, and Harvard Kennedy School. It is coordinated by GobLab UAI and supported by the Harvard-UAI Collaborative Research Grant of the David Rockefeller Center for Latin American Studies.

We would like to thank the President of the Senate, Jaime Quintana, the President of the Bicameral Group, Deputy Paulina Nuñez, the Vice-President of the Bicameral Group, Senator Alfonso De Urresti, the Secretary of the Senate, Raul Guzman, and Congress officials Roberto Bustos, Patricio Alvarez, Cristian Carrion, Alejandra Carvallo, Valeska Espinoza, Lidia Fuentes, Rocio Noriega, Maryan Henriquez, Alvaro Sandoval and Veronica Seguel.

Special thanks are due to the co-investigator of the CrowdLaw project, Victoria Alsina, and to Marcela Renteria, Executive Director of the Regional Office of the David Rockefeller Center for Latin American Studies.

The project's data science research assistant was Jaime Constanzo. Qualitative research assistants were Jim de la Rosa, Valeria Machmar, Daniela Pavez, Jose Pablo Arraño and Sebastian Lombera.

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EXECUTIVE SUMMARY

Chile has had a web platform called Senador Virtual (Virtual Senator) since 2003, where people can approve, reject or abstain from voting on actual bills that are under discussion at Senate commissions. A report is generated with the voting results, which is delivered to the Senators for their consideration in the discussion of the bill. This way, and although the votes are not binding, citizens can give their direct opinion on various matters under discussion. This paper shows the main results of the analysis of the platform and its users. Then it provides recommendations that will allow solidifying the years of experience and the robustness of the system.

In the 16 years of operation of Senador Virtual, 289 bills have been uploaded to the platform. There has been a decreasing number of bills uploaded per year from 40 in 2004, to only 7 in 2018.

136,229 users have registered on the platform, and they decide whether they wish to provide personal information at the time of registration. Despite this voluntariness, more than 99% of the users agree to provide personal information. From the total number of users who provide information, 53.5% of those registered are men, 58.4% of the users declare to be in the 18-29 age range at the time of registration and 53% state the Metropolitan Region of Santiago de Chile as their place of residence. Therefore, there is a need for increased diversity among the users, which could enrich the discussion on the platform.

The most voted bills during the platform's 16 years of operation were those in which there was a significant media presence such as: the decriminalization of marihuana use, the decriminalization of abortion, euthanasia, etc. On the platform, users can also leave comments on their votes. The analysis of the number of most commented bills (32,086 users have commented at least once) coincides with the most voted bills. We also identified that most users comment and vote only once. Future research could be aimed at identifying the reasons behind this "single-interest" voting behavior.

In addition to the descriptive statistics from above, a qualitative analysis was conducted. Through interviews with users -who have participated in at least 3 bills- as well as the administrators of the platform and Senators. And a digital ethnographic observation to the citizen participation in 8 bills and the platform itself, we found that recurring users tend to agree on the importance of citizen engagement, and despite not receiving feedback on the acceptance level of the votes and/or comments, they point out that they will continue to participate on Senador Virtual.

From the qualitative analysis, we conclude that the report generated from the votes and comments has certain weaknesses: in some bills, a small proportion of users vote with more than one alias[1]; the wording of the questions induces answers; in several statements, there are questions regarding more than one matter, which doesn't necessarily reflect the citizen's intention; and the contributions are classified based on the same fundamental ideas on which it was voted, excluding other relevant information that might emerge from the users' comments. Lastly, the analysis of the comments is performed manually and not necessarily by a professional knowledgeable in qualitative analysis, which leads to errors and biases in the report. All these weaknesses have caused the report to finally not be used as a key input in the discussions of the commissions, thus decreasing the actual impact of the Senador Virtual platform.

Based on the findings, a series of recommendations are made. They seek to strengthen the platform, increasing its uptake among the citizens, the number of users and the recursion of their participation, and also strengthening the role of the Senators and their use of the information obtained from the citizens' contributions. We particularly recommend the following:

1. Include a user authentication system for all participants in order to match the number of votes and comments to actual individuals.

2. Extend the use of this tool in order to capture useful information for the legislative process by increasing the number of bills being discussed and the number of users from heterogeneous and diverse origin.

3. Favor and encourage the participation of the Virtual Senators on more than one occasion on the platform.

4. Generate mechanisms to identify the most frequent positions in order to separate them from the points of view that are absent from the media debate and which may be relevant for the legislative process.

5. Have a team proficient in qualitative analysis and with a permanently-assigned hourly workload that writes the appropriate questions and generates reports that are pertinent and useful to the parliamentary discussion.

6. Include the report in the history of the law and the metrics in the Legislative Information System in order to improve access to the voting results, so they are available to parliamentarians as the "citizen input" report of Senador Virtual.

[1] *Using Levenshtein's mathematical algorithm, we found that only 2,914 users (2% of the total of registered participants) had aliases or nicknames.*

>1 INTRODUCTION

The demand for citizen engagement in governance processes has been strongly expressed in Chile and the world. Citizens want to express themselves regarding important topics, not just in social media or by electing representatives. Apparently, institutions have failed to respond to this phenomenon, and the population has steadily lost trust in their representatives and the political elite. The May 2019 CERC-MORI survey indicates that the Senate, Deputies and the Parliament are the 3 public institutions with the lowest level of trust. Politicians, Senators and Deputies are also the least trusted (only surpassed by priests and bishops).

The world and our understanding of democracy is changing. Nation-states must deal with these changes by bringing processes closer to the citizens and thereby improving their legitimacy. It is within this framework that the United Nations declared in 2015 that "Peace, Justice and Strong Institutions" should be a sustainable development goal. Target 16 of this particular objective is to "Ensure responsive, inclusive, participatory and representative decision-making at all levels [...]" (United Nations, 2018).

In recent years, there has been much talk about the importance of implementing Open Government policies. Open Government has various definitions, but all of them coincide in that a government of this nature must promote the participation and collaboration of citizens in various government issues, together with increasing transparency in decision-making processes. A greater citizen engagement not only strengthens institutions, but also "enhances deliberation processes and legislative content" (PNUD, 2016). It is in line with this challenge that Chile joined the Open Government Partnership in 2011. This association reunites 79 countries committed to developing work plans to bring the government closer to the citizens with clear and measurable goals. The alliance recognizes that the challenges of modern societies are complex, which is why new forms of legislation are required, as it is no longer enough for those in power to make the decisions; people want to participate. Various studies have shown that a greater citizen engagement accomplishes improvements in health, education and the economy (OGP, 2019). Starting in 2014, the Chilean Congress joined these efforts through the creation of three Open Parliament action plans coordinated by the Bicameral Group on Transparency, the most recent one for the 2019-2020 period.

Despite the fact that the open government movement is a relatively recent phenomenon, Chile has had a web platform called Senador Virtual (Virtual Senator) since 2003, where people can approve, reject or abstain from voting on actual bills that are under discussion at Senate commissions. A report is generated with the voting results, which is delivered to the Senators for their consideration in the discussion of the bill. This way, and although the votes are not binding, citizens can give their direct opinion on various matters under discussion.

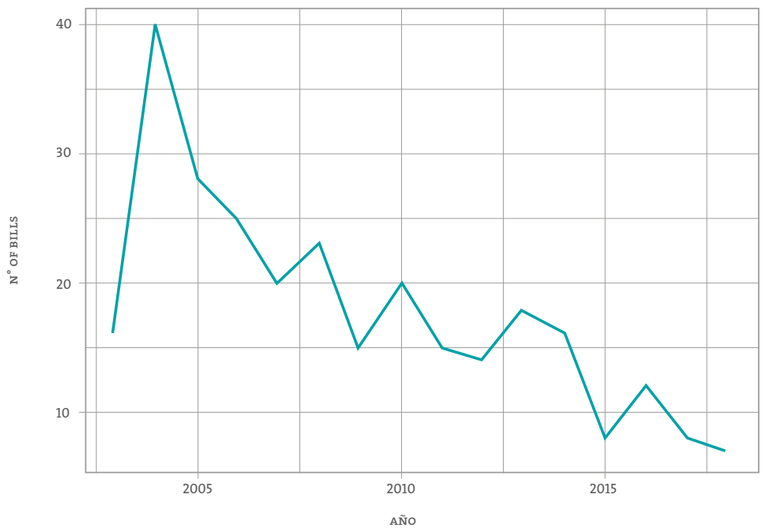
Although the platform exists and this fact alone is paramount, it is imperative to make it more robust, in line with the challenges of an open government. This report presents the most relevant results of an analysis conducted on this platform, including the types of bills that are uploaded, the demographics of the participants and their behavior. Finally, it delivers recommendations for action items aimed at strengthening citizen engagement processes on Senador Virtual, which might be relevant for the implementation of a new participation platform called "Congreso Virtual" (Virtual Congress), as well as other actions in this area.

>2
THE PLATFORM

Although the Senador Virtual Platform was designed and was managed by the Senate's IT area, the platform was operated most of the time -2013 to 2019- by the Department of Information. Likewise, part of their management required an adhocratic committee for consultation. The committee was composed by the commissions legal secretaries, and officials from the Senate's Press area and the Information Office´. The committee decided which bills were submitted to public vote and for how long. Then the Department of Information systematized the results and generated a report that was emailed to the head of the commission and directly to the Senators, members of of the aforementioned comission, to their institutional email.

In its 16 years of operation, 289 bills have been entered into Senador Virtual so the users can vote on them (i.e. in favor/against/abstention). Although the average of bills entered into the platform is 18, there has been a sustained decline over the years, as Figure 1 shows.

FIGURE 1: NUMBER OF BILLS UPLOADED TO SENADOR VIRTUAL PER YEAR



In this figure, we can observe that the flow of bills has not remained constant over time, showing a downward trend after a peak in 2004, the platform's second year of operation, in which 40 bills were uploaded. This trend reached its lowest point in 2018, when only 7 bills were uploaded to the Senador Virtual platform. Although the reasons why the decision was made to upload fewer bills respond to internal motives of the organization, we cannot determine this trend's impact on participation. However, we can say that the platform has maintained a flow of bills on which users can express their opinion.

All users can access the bills' history of previous voting results and see the current voting status for the bills in progress. However, to vote on a bill and leave comments, it is necessary to complete a registration process that only requires a valid email address where people must verify their identity. Although the total number of people registered on Senador Virtual has reached 136,229 in these 16 years of operation, this total doesn't necessarily represent the definitive number of users who have interacted on the platform. Given the difficulty to know a priori whether an email account is valid or not, or whether the person finally decides to validate their identity, all we can conclude is that there are 93,103 users for which it's been verified that they have actively participated on the platform at least once. Nonetheless, since it has not been possible to verify that the other users do not exist, this report will work with the entire universe of 136,229 registered users.

>3
CHARACTERISTICS OF THE VIRTUAL SENATORS

When they register on the platform, users are asked to voluntarily submit their personal data (i.e. gender, age range, region of residence and occupation), so there is no demographic data available for all those registered.[2] In this sence, there is also no way to verify that the submitted data is correct.

Keeping the aforementioned limitations in mind, we have chosen to analyze the personal characteristics of users in order to create a profile for the Virtual Senators that can serve as a reference for the types of users who access this platform. When the data is disaggregated by gender, we find that women account for 46.5% of the total number of registered users.

By way of comparison, in the most recent census, women represent 51.1% of the total population (INE, 2018). Figure 2 shows the flow of new registrations disaggregated by gender since the creation of Senador Virtual until 2018.

[2] *99.8% of the users declare a gender and/or age range, and 99.7% of the users state a region of residence.*

FIGURE 2: NUMBER OF REGISTERED USERS BY YEAR AND GENDER

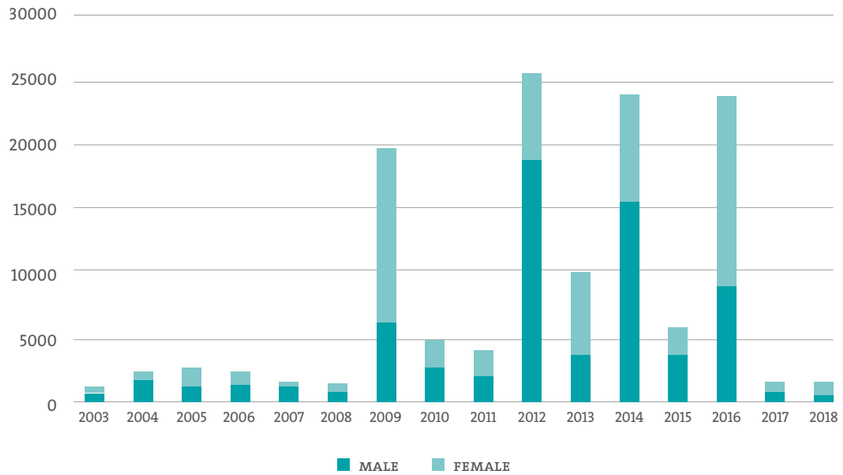


Figure 2 shows two interesting phenomena: first, registration peaks, and secondly, years in which more women than men registered. Regarding the first phenomenon, we see that in the platform's first 6 years of life, very few people registered to participate (less than 3,000 users), which might lead us to think that the situation could be explained by little knowledge about the platform in its initial stages. However, this trend remains constant over time, with the exception of some registration peaks in 2009, 2012, 2013, 2014 and 2016.

Regarding the second identified phenomenon, we observe that there is a positive correlation between a predominant registration of women and the newly identified registration peaks. The years in which more women than men registered were 2009 (68.5%), 2013 (63.4%), 2016 (61.3%) and 2018 (61.1%), all of them years of registration peaks, with the exception of 2018. It is also interesting to point out that, in general, when the registration of women increases, it does so in a very significant manner, by over 55%. On the other hand, it is important to mention the reverse trend observed in 2008 (59.2%), 2012 (73.8%), 2014 (65.7%) and 2015 (64.8%), when men predominantly registered on the platform. An initial hypothesis that could explain these differences might be linked to the types of bills that were discussed in those years. This possibility will be analyzed in more detail later.

When we break down Virtual Senators by age group, we find that most of the registered users belonged to the 18-29 age range at the date of their registration, regardless of their gender.

TABLE 1: REGISTERED USERS BY AGE GROUP AND GENDER

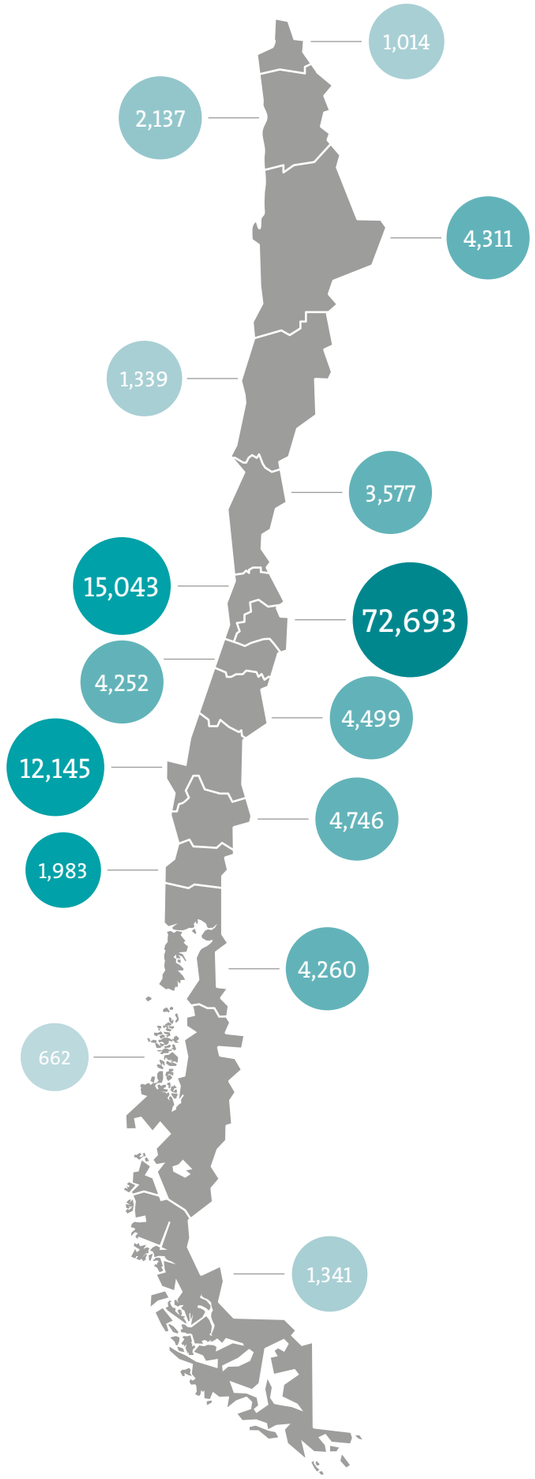
AGE GROUP	MALE	FEMALE	TOTAL
1-17	4,024	4,558	8,582
18-29	44,645	34,827	79,472
30-49	17,354	16,904	34,258
50+	7,421	6,246	13,667
TOTAL	**73,444**	**62,535**	**135,979**

It is important to highlight that the registration form requires people to select their age range, not their year of birth, so we cannot conclude that the shares presented here are currently the same. However, it is worth noting that at the time of registration, most users declare to be in the 18-29 age range, regardless of their gender. It is interesting that only 10% of the users declare to be older than 50 at the time of registration, as according to the 2017 Census, 28.8% of the population was older than 50 (NIS, National Institute of Statistics, 2018). This trend differs from other traditional participation systems in which middle-aged and senior adults predominate, such as popular votes, which makes this a mechanism that opens up spaces for diverse political participation.

If we analyze the distribution of the users by region, we see that from the 135,954 (99.7% of the total number of registered) users who state a region of residence, 53% said they live in the Metropolitan Region, followed by 11% who state Region V, and Region VIII with 8.9% of the users. Once again, these numbers pose a representativeness challenge for the platform.

DISTRIBUTION OF USERS BY REGION

TOTAL: 135,954



As for the occupation stated by the users, "student" is predominant with 43%, which makes sense in terms of the high percentage (58%) of users who declare to be in the 18-29 age range. The second category with a high percentage is "dependent worker", with 31%. All categories exhibit a greater proportion of men than women, with the exception of "housewife", but this phenomenon might be due to the fact that this option implies a female gender.

In general terms, we can conclude that most registered users declared to be between 18 and 49 years old (82%). Over 50% are male (54%), and they generally declare to be students (43%) or dependent workers (31%). The place of residence for most of them is the Metropolitan Region (53%), and secondly Region V (11%).

This demographic information is required once during the registration process, so we cannot come to conclusions regarding the current demographic characteristics of the users. But we can assert that the diversity of the users must be increased in order to obtain a better representation of the citizens in the legislative process.

>4
BILLS UPLOADED TO THE PLATFORM

An analysis of the bills uploaded to Senador Virtual throughout its 16 years of operation is presented below. The following table shows the 10 most voted bills on the platform, including the overall voting result.

TABLE 2: TEN MOST VOTED BILLS ON SENADOR VIRTUAL

Nº	BILL	DATE	IN FAVOR	AGAINST	ABSTENTION	TOTAL
1.	Allows growing marihuana for personal, therapeutic or spiritual use	21-08-2014	20,087	1,230	159	21,476
2.	Allows growing marihuana for personal use	10-08-2012	17,182	964	106	18,252
3.	Decriminalizes the termination of pregnancy on three grounds	02-04-2016	4,389	12,798	105	17,292
4.	Liability for damages aused by dangerous animals	05-11-2009	1,686	9,638	499	11,823
5.	Bill that decriminalizes abortion in the indicated cases	19-12-2014	3,034	7,106	130	10,270
6.	Establishes a plebiscite to change the Constitution through a Constituent Assembly	13-09-2012	6,156	387	73	6,616
7.	Amendments to the juvenile criminal law	18-03-2016	5,194	150	188	5,532
8.	Deducts unjustified absences to Chamber or Commission sessions from parliamentarians' allowances	05-09-2014	4,512	97	144	4,753
9.	Regulates euthanasia	03-10-2014	3,062	1,491	109	4,662
10.	Allows a marriage contract between people of the same sex	18-08-2010	2,405	2,170	59	4,634

In the table above, we observe that bills with a high media presence, such as liability for damages caused by dangerous animals, the bill that allows growing marihuana for personal, therapeutic or spiritual use, the one that allows growing marihuana for personal use and the bill that decriminalizes the termination of pregnancy on three grounds, are more voted. It is important to highlight that all these bills (with the exception of the last) were discussed on the platform in the years in which a greater registration of people was observed. However, we must be careful not to establish a causal link between one phenomenon and another, as it does not run in both directions (for example, there are no bills from 2013 in the most voted list).

When we analyze the bills with the highest number of comments, we find there is a positive correlation between the most commented and the most voted bills (9 out of 10 bills also appear in the most voted category). This result allows us to hypothesize that in the most voted bills there is an interest on the citizens' part to express an opinion or justify a position beyond marking their vote.

>5
ABOUT THE BEHAVIOR OF THE VIRTUAL SENATORS

As previously stated, due to the user authentication system, we cannot say who among the 136,299 are valid users, but we can conclude that there are at least 93,201 users who have already interacted with the platform at least once. Notwithstanding the foregoing, we have classified the various users of Senador Virtual into 4 categories:

1. Observer: registers but does not participate.
2. Opportunist: has only participated once.
3. Sporadic: has participated twice.
4. Recurring: has participated 3 or more times.

Virtual Senators can participate on the platform through 2 mechanisms: bills and fundamental ideas. When voting on bills, users respond to the question "Do you agree that this matter should be legislated upon?", whereas the voting of fundamental ideas asks about a Virtual Senator's level of agreement with the core aspects of the bill. It is important to stress that not all users vote in both mechanisms, which is why Table 3 shows the various types of voters for each type of voting.

TABLE 3: USER CHARACTERISTICS ACCORDING TO FREQUENCY AND TYPE OF VOTING

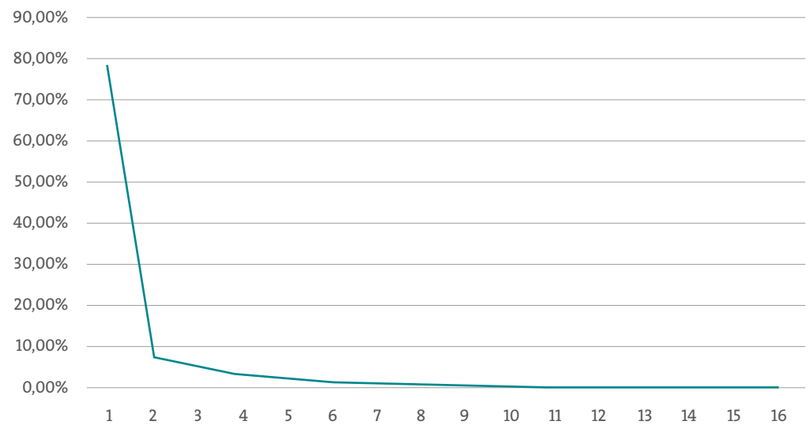
VOTING OF A BILL	NUMBER OF VOTES	VOTING OF A FUNDAMENTAL IDEA	NUMBER OF VOTES
RECURRING (>3)	30,182	RECURRING	31,054
SPORADIC (=2)	12,618	SPORADIC	15,117
OPPORTUNIST (=1)	50,303	OPPORTUNIST	46,097
OBSERVER (=0)	41,906[3]	OBSERVER	42,741[4]
TOTAL	**135,009**	**TOTAL**	**135,009**

Among the observer users, we can eliminate 1,220 that we are certain are invalid email addresses due to spelling mistakes or incorrect extensions. We can see in Table 3 that most of the users are opportunists, followed by observers. However, there is an important share (23%) that actively participates on the platform, in more than 3 bills. As for the 31% of users who have never participated, we can offer technical reasons to explain these numbers, for example, the email address was entered incorrectly, they never received the verification email, etc. Nonetheless, to think that all observer users had a technical issue is a generalization we cannot make. Keeping this in mind, in the future, it would be interesting to study why people decided to register but never participated on the platform in order to implement policies that would make participation more appealing.

Although the vast majority of the users (69%) participate in at least 1 bill, we can observe that the interest in participating on the platform does not remain stable over time and even causes us to think that a large share of users have participated only once probably for personal reasons, given the high number of opportunists. Figure 3 shows the participation survival rate over the years for all registered users.

[3] Observer users (1,220) are excluded for being users with invalid email addresses.
[4] Observer users (1,220) are excluded for being users with invalid email addresses.

FIGURE 3: USER PARTICIPATION SURVIVAL



We can see in Figure 3 that the highest user participation occurs in the first year of registration on the platform, and it decreases strongly and steadily going forward. In the first registration year, 78% of the users participate in some way on the platform, while only 7% do so during the second year. This phenomenon, along with the high number of users who participate only once, demonstrates that the Senador Virtual platform has huge potential, yet also the challenge to retain users so they continue to participate in the various bills that are entered into the platform.

In addition to voting on bills, users can leave their comments. These are reviewed by a moderator who decides whether the content of the comment is suitable for publication or not. "Commentator" users amount to 32,086, which represents 24% of the total number of registered users. Just like in the previous point, we can divide commentators into the categories of opportunist (only comments once), sporadic (comments 2 times) and recurring (comments 3 or more times). Table 4 shows the relationship between voters and commentators in the different categories.

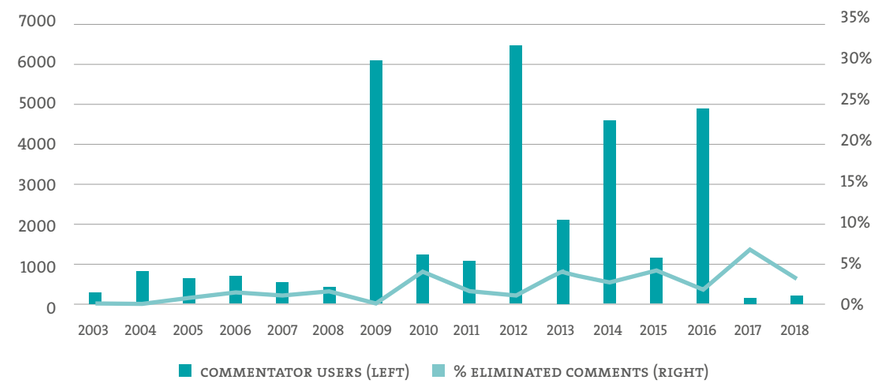
TABLE 4: COMMENTATOR USER TYPE BY TYPE OF USER IN BILL VOTING

	TYPE OF USER IN BILL VOTING			
TYPE OF COMMENTATOR USER	**RECURRING**	**SPORADIC**	**OPPORTUNIST**	**TOTAL**
RECURRING	2,466	697	3,341	6,504
SPORADIC	1,569	496	2,131	4,196
OPPORTUNIST	8,292	2,427	10,667	21,386
TOTAL	**12,327**	**3,620**	**16,139**	**32,086**

We can see in Table 4 that most commentator users are opportunists, meaning that they only comment once, followed by recurring commentators. However, we cannot establish any sort of relationship between the types of voters and commentators, i.e., we cannot predict that a higher participation recursion will lead to a greater number of comments left by each user.

The largest amount of eliminated comments is recorded in 2014 (155), followed by 2016 (107), 2012 (92) and 2013 (96), years in which participation peaks as well as comment peaks occurred. It is worth mentioning that the eliminated comments fail to surpass 0.8% of the total.

FIGURE 4: NUMBER OF COMMENTATOR USERS AND PERCENTAGE OF ELIMINATED COMMENTS PER YEAR



Among the 45 most common words in the eliminated comments, the first word with a clearly negative connotation is "ladrones" (thieves), which only appears in 42nd place and with only 21 repetitions in 700 comments. The first places are occupied by common words that do not have a negative connotation, such as "ley" (law), "pregunta" (question), "Temuco", "Chile", etc. In the analysis of the 45 most common words there are no swearwords or otherwise damaging remarks at any time. The respectful language and earnestness of the comments contributes to the creation of a healthy public sphere in the discussions carried out on Senador Virtual.

>6
QUALITATIVE OBSERVATIONS TO SENADOR VIRTUAL

Along with the statistical analysis, a series of interviews with the users and operators of the system were conducted in 2018 and 2019, as well as a digital ethnography of 8 bills that were voted on the platform in order to obtain an in-depth understanding of the interactions that took place on it. Considering both information sources together, we managed to specify a series of aspects that complement the previously presented quantitative analysis.

On one hand, in terms of the platform's operation, it was established that the procedure for selecting the bills to be entered is provided by the media's agenda and not by the value of having useful information for the legislative process – or "educating" the population on how the Congress works (an objective set at the platform's origin).

On the other hand, despite the concern over writing clearer questions, some of them prompt answers from the voters and influence the voting results. Some questions are double-barreled, which makes it difficult to understand and determine exactly what is being approved or rejected. Finally, it was found that the dissemination of the tool has not been encouraged, which explains why the number of registered users falls each year.

Through interviews with users who have participated on the platform more than 3 times, we were able to identify that – despite the fact that there is no feedback on their input – they recognize a value in participating on Senador Virtual. This value is provided by the possibility of being involved in a law's creation process and stating their point of view. Along with the foregoing, in the virtual engagement process, these citizens fulfill their public calling, which on some occasions motivates them to get involved in new participation instances.

Regarding the interactions on the platform, using a qualitative research technique known as digital ethnography, we

undertook the documentation of interaction patterns, languages and norms. Our team of 7 researchers determined three ways of interacting with the platform. First, the comments left by the users are written in formal language and etiquette: "Respected Senators", "Gentlemen of the Congress", etc. Secondly, the majority of users sign with their real names at the end of their comments. Thirdly, many comments have over 300 characters and respect a logical structure that accounts for a certain reflection and time devoted to the platform. Finally, in a deeper review of the contributions, we discovered four types of comments: a) 17.9% expressed an opinion and 76.4% formulated an argument; b) 25.19% were ideological; c) 5% were anecdotal; and d) 65% contributed information to the debate.

As for the processing of the inputs obtained from the platform, we verified that the Information office sends the summary report with the results before the bills are discussed to the head of the commission and directly to the Senators who are members of the same commission. However, there were weaknesses in terms of the validity and reliability of their report. For example: in some bills, a small number of people voted with more than one alias[5]; the wording of the questions induced specific answers; several statements contained more than one question, which did not necessarily allow to reflect the citizen's intention; and the contributions are categorized based on the same fundamental ideas on which people voted, excluding other relevant information that could emerge from the comments of the users.

The qualitative data is processed manually by staff without training in qualitative analysis or social sciences. Thus, there are reliability issues because the comments are categorized according to whether they relate to the fundamental ideas. Otherwise, they fall under the category of "other contributions". Additionally, this categorization is performed during the first two voting weeks, so any information added afterwards is lost. Lastly, the report only highlights the comments deemed most frequent by the moderator, without including any new information or peculiar contents.

In addition, interviews were conducted with the Senators in which they expressed the same type of concerns about the platform and/or the report. This could explain why the final report doesn't have an effect on the discussions and has become an element not reviewed within the teams. It is surprising that there is an almost absolute lack of knowledge about the platform among those who could benefit from the data it offers.

Finally, regarding the use of the information generated on Senador Virtual, we identified that the report with the results is not used or consulted during the legislative discussion, but only mentioned at the beginning of the work within the commissions. Moreover, the platform's results are not integrated with other information sources produced at the Senate that could be relevant for the Senators. For example, the information could be integrated into the Legislative Information System (SIL, Sistema de Información Legislativa) or the history of the law.

[5] Using Levenshtein's mathematical algorithm, we found that only 2,914 users (2% of the total of registered participants) had aliases or nicknames

>7 CONCLUSIONS AND PUBLIC POLICY IMPLICATIONS

We can conclude that the Senador Virtual platform has multiple strengths, such as a consolidated experience reflected in its 16 years of operation, which has managed to generate a formal participation space with clear rules and users who act with respect and sobriety, justifying their opinions. In spite of this, in the systematization of our findings, we were also able to notice some weaknesses. The most evident weaknesses are related to the analysis of the information produced by the users and the generation of the voting reports, which do not allow harnessing the potential of the collected information and the dynamics generated among the users.

Suggestions for Strengthening the Senador Virtual Platform

- Include a user authentication system. The system must be capable of identifying that the votes and contributions are made by people. This does not mean increasing barriers to participation, as our study shows that generating participation standards and "authentication" methods contributes earnestness to the involvement and makes it seem more institutional. Pseudonymization (not being accessible to other users) could be an option, yet still authorizing them to be contacted by commissions and parliamentarians. This would add value by knowing that each vote corresponds to a person interested enough in the bill to vote on it (always keeping in mind that these proportions do not represent the proportions of the citizens outside the platform).

- Extend the use of this tool in order to capture useful information for the legislative process, adding value to the parliamentary debate. To this end, it is necessary to increase the number of users in quantity and heterogeneity; increase the number of bills being voted by changing the selection criterion; and carry out outreach campaigns for the platform, possibly targeted. This will allow increasing the participation and representativeness of the users and their opinions on Senador Virtual.

- Favor and encourage the participation of the Virtual Senators on more than one occasion on the platform through direct communications with the users by inviting them to get involved in new bills. Increase citizen engagement so the platform's voting instances are more representative.

- Generate mechanisms to identify the most frequent positions in order to separate them from the points of view that are absent from the media debate and which might be relevant for the legislative process, highlighting them in the final report and giving them a detailed treatment that allows extracting useful information for the bill under discussion.

- Have a team proficient in qualitative analysis and with a permanently-assigned hourly workload that generates reports. In addition to the theme categories on which it is voted, the reports must contain other useful information for the legislative process, offering subdivisions according to the types of contributions. This would be consistent with the initial objectives based on which this platform was designed.

- Include the report in the history of the law and the metrics in the Legislative Information System in order to improve access to the voting results, so they are available to parliamentarians as the "citizen input" report of Senador Virtual.

The recommendations offered here are based on the quantitative and qualitative analysis of the Senador Virtual platform, as well as the Senators' impressions on the importance and role of the platform. They seek to strengthen the role of Senador Virtual – as well as future engagement platforms implemented by the Chilean Congress – as a way to bring legislative processes closer to people, following the guidelines of an Open Government and the challenges undertaken by the Chilean Government and its Parliament within the framework of the Open Government Partnership.

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